Application No. 09/778,371

## Claim Amendments and New Claims

This listing of claims will replace all prior versions and listings of claims in the present application.

## **CLAIMS**

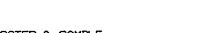
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(Currently Amended) An absorbent article comprising:

- (1) a backsheet;
- (2) a liquid pervious topsheet joined to the backsheet;
- (3) an absorbent core disposed intermediate to the topsheet and the backsheet; and
- (4) a thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
  - a) maintaining the article at a predefined temperature,
- b) maintaining relative humidity in a volume between a wearer and the article when the article is worn
  - c) melting a material disposed on the article,
  - d) changing a mechanical property of a [different] component of the article other than the thermal cell actuator,
  - e) changing the breathability of a component of the article, and
  - f) changing the vapor pressure of a material disposed on the article.
- 2. (Currently Amended) An absorbent article comprising:
  - (1) a backsheet;
  - (2) a liquid pervious topsheet joined to the backsheet;
  - (3) an absorbent cope disposed intermediate to the topsheet and the backsheet;
  - (4) a thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
    - a) maintaining the article at a predefined temperature,
    - by maintaining relative humidity in a volume between a wearer and the article when the article is worn
    - c) melting a material disposed on the article,

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- d) changing a mechanical property of a [different] component of the article other than the thermal cell actuator,
- e) changing the breathability of a component of the article, and
- f) changing the vapor pressure of a material disposed on the article; and
- (5) a triggering mechanism connected with the thermal cell actuator whereby a [non-urine] force or sensor based signal within the article causes the thermal cell actuator to add or remove heat from at least a portion of the absorbent article.
- (Currently Amended) An absorbent article comprising:
  - (1) a backsheet:
  - (2) a liquid pervious topsheet joined to the backsheet;
  - (3) an absorbent core disposed intermediate to the topsheet and the backsheet; and
  - (4) an electrically powered thermal cell actuator which adds or removes heat from at least a portion of the absorbent article upon actuation so as to result in a useful function selected from the group consisting of:
    - a) maintaining the article at a predefined temperature,
    - b) maintaining relative humidity in a volume between a wearer and the article when the article is worn
    - c) melting a material disposed on the article,
    - d) changing a mechanical property of a [different] component of the article other than the thermal cell actuator,
    - e) changing the breathability of a component of the article, and
    - t) changing the vapor pressure of a material disposed on the article.
- 4. (Previously/Amended) The absorbent article of claim 1 wherein the thermal cell actuator the function is performed at location between the backsheet of the article and the skin of the wearer in response to a change in relative humidity, moisture, or temperature.
- 5. (Previously Amended) The absorbent article of claim 1 wherein the thermal cell actuator performs the function in response to the application of a tensile force by a caregiver to extend a portion of a garment body, or in response to the application of a normal force to compress a portion of the garment body by a caregiver.



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- 6. (Currently Amended) The absorbent article of claim 1 wherein the action of [the] a caregiver is an application of a tensile force to peel a tab exposing an opening in the thermal cell actuator which allows for the [activation] actuation of said actuator.
- 7. (Original) The absorbent article of claim 1 wherein the thermal cell actuator controls humidity or temperature in the article.
- Canceled
- 9. (Original) The absorbent article of claim 1 wherein the thermal cell actuator includes a material that performs an exothermic or endothermic reaction.
- 10. (Previously Amended) The absorbent article of claim 9 wherein the thermal cell actuator performs an endothermic reaction using a reactant selected from the group: Na<sub>2</sub>HPO<sub>4</sub>\*12H<sub>2</sub>O, Na<sub>2</sub>SO<sub>4</sub>\*10H<sub>2</sub>O, Na<sub>2</sub>CO<sub>3</sub>\*10H<sub>2</sub>O, NH4NO3, KCI, NH4Cl, KNO3, NaNO3, KCNS, NH4CNS, Urea, NaCH3COO\*3H2O.
- 11. (Previously Amended) The absorbent article of claim 1 wherein the thermal cell actuator includes a Peltier cell.
- 12. (Original) The absorbent article of claim 1 comprising a thermal cell actuator that provides a constant temperature in a region of the article during use of the article of about 15° to about 25° Celsius.
- 13. (Original) The absorbent article of claim 12 wherein the thermal cell actuator is not in contact with the wearer's skin when the article is worn.
- 14. (Original) The absorbent article of claim 12 wherein the thermal cell actuator is in vapor communication with the wearer's skin such that vapor can condensate inside the article.
- 15. (Original) The absorbent article of claim 12 wherein the thermal cell actuator is triggered by a user during application of the article.
- 16. (Original) The absorbent article of claim 12 wherein the constant temperature in the region is maintained for at least 1 hour.
- 17. (Currently Amended) The absorbent article of claim 1 wherein the thermal cell actuator changes a mechanical property of a [different] component of the article other than the thermal cell actuator.

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- 18. (Original) The absorbent article of claim 17 wherein the component of the article is a waist opening or a cuff opening.
- 19. (Previously Amended) The absorbent article of claim 1 wherein activation of the thermal cell actuator results in a change in the vapor pressure of a material disposed on the article.
- 20. (Original) The absorbent article of claim 19 wherein the thermal cell actuator provides at least a portion of the article with a temperature of less than about 25° celsius.